



**US Army Corps
of Engineers®**
Jacksonville District

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FOR IMMEDIATE RELEASE

NO (HURRICANE) NEWS IN 2007 IS GOOD NEWS FOR U.S. ARMY CORPS OF ENGINEERS HERBERT HOOVER DIKE REHABILITATION PROJECT

JACKSONVILLE, Fla. -- For the second consecutive year, south Florida was spared the trauma of either a hurricane or a strong tropical storm. The quiet storm season has provided many benefits. For the Herbert Hoover Dike Rehabilitation Project, work continued uninterrupted as engineers and laborers were able to make unprecedented progress on inspecting structures and fixing areas most in need of repair.

"We and our partner on Lake Okeechobee, the South Florida Water Management District (SFWMD), have faced tremendous challenges due to this year's record-setting drought," said Jacksonville District commander, Col. Paul Grosskruger. "I want to express our deepest appreciation to the SFWMD and local governments for enacting strict water conservation measures. At the same time, however, the drought has enabled the Corps of Engineers to make great progress in our efforts to rehabilitate Herbert Hoover Dike and provide continued protection for the communities we serve."

With both calm weather and record low elevations on Lake Okeechobee, the U.S. Army Corps of Engineers identified and prioritized dike focus areas and expedited repairs ahead of schedule. The need to drain or dewater areas in the toe ditch was minimized due to low lake levels. These conditions also allowed inspectors to visually assess the conditions of structures that make up the 143-mile dike. Average lake levels require some inspections to be conducted by specially trained SCUBA divers, remote operated vehicles with underwater cameras, or by closing off and dewatering the site, which can take up to a week to accomplish. Instead, Corps engineers were able to navigate boats through the culvert structures, resulting in major reductions in time, effort and costs.

"Before, we could only schedule three or four culvert inspections a year, but now there's been – and will be in the near-term – more opportunity to conduct inspections," said Brent Trauger, dam safety program manager for the Jacksonville District. A geotechnical specialist was also able to conduct an inspection of the entire dike,



focusing on the crest and the lakeside slope, including the riprap and shoreline. The specialist observed areas that are usually under water. “These are areas that normally can’t be inspected but we’re taking advantage of the rare opportunity allowed by the lower elevations,” Trauger said.

The miles of toe ditch construction will help prevent piping, or internal erosion of the dike, where water that naturally seeps through the earthen dike increases and carries sediment and other materials through pipe-like holes. This creates cavities that, if undetected, may cause breaches and flooding. Toe ditch construction counters pressure caused internally by rising waters by balancing pressure on the landside of the dike. The fill material also acts as a filter that prevents seepage by catching and holding foundation materials.

Construction on the seepage berm, which lies atop the toe ditch and helps prevent piping, moved forward in September as Corps contractors began construction in one of the most critical reaches – Reach 1, Port Mayaca to Belle Glade. This autumn, the Corps also awarded three contracts for cutoff wall construction. The first of these contracts is currently under way. This puts the dike rehab into full production within the Corps’ right of way.

While the tempo of inspections and construction has increased during the past year, so has the pace of Jacksonville District’s fast-track projects at the dike. HHD team members are researching the real estate footprint to continue toe ditch and berm construction in focus areas outside the Corps right of way. Current coordination with the South Florida Water Management District has begun on acquisition of identified properties needed to make repairs in **focus areas only**.

During a recent Headquarters External Peer Review conference, a leading member of the panel, Dr. Donald Bruce, had this to say about the Herbert Hoover Dike Rehabilitation: “We observed that this whole project is in a fast-track situation with a lot of parallel tasks, and this reflects the degree of concern that we all share about the ongoing safety of this unique structure. With respect to the pace at which the work is done, it really is quite extraordinary.” Dr. Bruce is one of six members serving on the external peer review panel, which includes international engineering and science experts, all from organizations external to the federal government.

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